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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/536,205 | 03/27/2000 | Kayla R. Klingman | 6836-US | 3499 |

7590

03/11/2004

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EXAMINER

CHUNG, DANIEL J

ART UNIT

PAPER NUMBER

2672

DATE MAILED: 03/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/536,205

Applicant(s)

KLINGMAN ET AL.

Examiner

Daniel J Chung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-6 are presented for examination. This office action is in response to the amendment filed on 12-18-2003.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Etheridge et al (5,986,637) in view of Sullivan et al (6,163,758).

Regarding claim 1, Etheridge et al discloses that the claimed feature of a method of operating an oscilloscope that is capable of displaying simultaneously multiple waveforms representing time evolution of a signal during respective acquisition intervals, comprising: a) acquiring [30] waveform data using a first set of acquisition parameters (See Fig 1, Fig 3); b) generating [50] a display based on the waveform data acquired in step a), in the event that the display generated in step b) includes a waveform that is visually distinct from other displayed waveforms [i.e. "anomalous signal"] (See Fig 1, Fig 3, Abstract, col 1 line 58-col 2 line14, col 3 line 5-10, col 11 line 31-62); c) selecting [57] a feature that distinguishes the visually distinct waveform from

other displayed waveforms, (See Fig 1, Fig 3, Abstract, col 1 line 58-col 2 line 14, col 3 line 5-10, col 11 line 31-62); d) automatically deriving [55,57] acquisition parameters that discriminate between the selected feature and other features of the displayed waveforms, (See Fig 1, Fig 3, Abstract, col 3 line 35-col 4 line 6, col 11 line 20-col 12 line 17); e) acquiring [30] waveform data using the acquisition parameters derived in step d), and f) generating[50] a display ["new composited image"] based on the waveform data acquired in step e) (See Fig 1, Fig 3, Abstract, col 3 line 35-col 4 line 6, col 11 line 20-col 12 line 17)

Etheridge et al does not specifically disclose that "acquiring waveform data using automatically derived acquisition parameters that discriminate between the selected feature and other features of the displayed waveform". However, such limitations are shown in the teaching of Sullivan et al. ["automatic detection of unusual waveforms"]. (See Abstract, col 1 line 1-8, col 4 line 8-col 5 line 11, col 12 line 15+) It would have been obvious to one skilled in the art to incorporate the teaching of Sullivan into the teaching of Etheridge et al, in order to "allow a user to reliably see/control input signal anomalies even when they occur only intermittently" (See col 3 line 5-16 in Etheridge, also See col 4 line 8-14 in Sullivan), thereby generating superior display accuracy for the analyzed waveform data with not complicated way of operating an oscilloscope, as such improvement is also advantageously desirable in the teaching of Etheridge et al for providing clear visual representation for selecting and combining various display parameters with simple and uncomplicated operation at faster processing time.

Regarding claim 2, refer to the discussion for the claim 1 hereinabove Etheridge et al discloses that step c) includes graphically defining a template that specifies the selected feature and step d) includes employing information regarding the template to derive additional acquisition parameters. (See Fig 1, Fig 3, col 12 line 9-16; Also See Fig 2, col 4 line15-col 5 line 11 in Sullivan)

Regarding claim 3, refer to the discussion for the claim 1 hereinabove Etheridge et al discloses that the oscilloscope has multiple trigger modes[20], step c) includes graphically defining a template that specifies the selected feature and step d) includes employing information regarding the template to select a trigger mode for preferentially acquiring waveforms that include the selected feature. (See Fig 1, Fig 2, Fig 3, Abstract, col 3 line 35-col 4 line 6; Also See Fig 2, col 4 line15-col 5 line 11 in Sullivan)

Regarding claim 4, refer to the discussion for the claim 1 hereinabove, Etheridge et al discloses that the template is a scalable rectangular box and step c) includes positioning and sizing the box so that it contains the selected feature. (See Fig 1, Fig 3, Abstract, col 3 line 35-col 4 line 6; Also See Fig 2, col 4 line15-col 5 line 11 in Sullivan)

Regarding claim 5, refer to the discussion for the claim 1 hereinabove, Etheridge et al discloses that the oscilloscope has a display screen on which the waveforms are

displayed and the template is a sketch generated on the display screen. (See Fig 1, Fig 3, Abstract, col 3 line 35-col 4 line 6; Also See Fig 2, col 4 line 15-col 5 line 11 in Sullivan)

Regarding claim 6, claim 6 is similar in scope to the claim 1, and thus the rejection to claim 1 hereinabove is also applicable to claim 6.

Response to Arguments/Amendments

Applicant's arguments with respect to claims 1-6 have been considered but are moot in view of the new ground(s) of rejection. Specifically, in response to applicant's argument that the cited references do not disclose that "distinguishes the visually distinct waveform from other displayed waveforms", newly provided reference (Sullivan et al) clearly discloses that automatic detection of unusual waveforms among other displayed waveforms. (See Abstract, col 1 line 1-8, col 4 line 8-col 5 line 11, col 12 line 15+) therefore, It would have been obvious to one skilled in the art to incorporate the teaching of Sullivan into the teaching of Etheridge et al, in order to "allow a user to reliably see/control input signal anomalies even when they occur only intermittently" (See col 3 line 5-16 in Etheridge, also See col 4 line 8-14 in Sullivan), thereby generating superior display accuracy for the analyzed waveform data with not complicated way of operating an oscilloscope, as such improvement is also advantageously desirable in the teaching of Etheridge et al for providing clear visual

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representation for selecting and combining various display parameters with simple and uncomplicated operation at faster processing time. See the rejection hereinabove.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Chung whose telephone number is (703) 306-3419. He can normally be reached Monday-Thursday and alternate Fridays from 7:30am- 5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael, Razavi, can be reached at (703) 305-4713.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks


Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.


JEFFERY BRIEN
PRIMARY EXAMINER

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djc
February 27, 2004